Fort Hamilton Energized Electrical Permit

An Energized Electrical Work Permit is required anytime electrical work is done on systems of 50 volts or greater and not being fully locked/tagged out. Permits must be staffed through the Directorate of Public Works-O&M Division and approved by the DPW COR for RBS.

Preliminary Information

Project information should outline what work is to be done and why it needs to be done without lockout/tagout. This information should be completed by the people that will do the energized work. The requestor is the person wanting the work done, such as the facility manager, the project manager, the shop foreman, etc. The requester's signature is not required, but the requestor will be aware of the information.

Requester: _____Work Request #: _____

Date: _____

Description of Work: _____

Circuit Information: Location: _____

Equipment: _____

Date/Time Work is Planned to Occur:_____

Reason equipment/circuit(s) cannot be locked out (include attachment, if necessary):

Consequences of unexpected fault or loss of power while energized work is in progress: _____

Requester of energized work (e.g., building occupant, facility manager, project manager, foreman, etc.): _____

Name & Title: _____ Signature: _____ Phone: _____

REQUIRED: Directorate of Public Works-O&M Division-COR: Approval of reason to allow work to be done while energized: _____

_____

_____

Approve: ☐ Disapprove: ☐ Name/Title: _____ Signature: _____

Approve: ☐ Disapprove: ☐ Name/Title: _____ Signature: _____

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Details of Work

The details of the energized work should be completed by a qualified person that will be doing the work. Workers must be fully trained, briefed, equipped and understand the procedures to be followed.

Detailed description of work to be performed: _____

_____

_____

Description of safety work practices to be followed:

Shock Protection Boundary: ____ Flash Protection Boundary:_____Flash Protection Hazard Category: _____

PPE required: _____

Means of restricting access to work area: _____Job Briefing Completed: _____

Shock Protection Boundary: ____ Flash Protection Boundary:_____Flash Protection Hazard Category: _____

PPE required: _____

Means of restricting access to work area: _____Job Briefing Completed: _____

Qualified worker(s): Are adequate worker safety precautions in place and being followed?:

Name & Title: _____ Signature: _____

Name & Title: _____ Signature: _____

REQUIRED: Approver (e.g., electrically qualified General Foreman or other electrically qualified manager):
All energized work permits must be reviewed and approved by two qualified persons, at least one in a managerial position, before work can begin.

Approve: ☐ **Disapprove:** ☐ **Name/Title:** _____ **Signature:** _____

Close Permit: Each permit is for a specific location, time frame, and task. Once work is complete, each permit must be closed out. Any incidents, unexpected occurrences or deviations from regular work practices will be noted and discussed with the workers doing this work and their supervisors.

Name & Title:_____Signature:

***Submit a copy of the completed permit to the Fort Hamilton Safety Office, Bldg 137C Poly Place, Suite 2E, Brooklyn, NY 11252.*

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Approach Distance Boundaries

Nominal System Voltage Range, Phase to Phase	Limited Approach Boundary: Exposed Movable Conductor	Limited Approach Boundary: Exposed Fixed Circuit Part	Restricted Approach Boundary; Includes Inadvertent Movement Adder	Prohibited Approach Boundary	Default Arc-Flash Protection Boundary (if no arc-flash analysis is available)†
50 to 300 V	10 ft 0 in.	3 ft 6 in.	Avoid contact	Avoid contact	4 ft 0 in.
301 to 750 V	10 ft 0 in.	3 ft 6 in.	1 ft 0 in.	0 ft 1 in.	4 ft 0 in.
751 V to 15 kV	10 ft 0 in.	5 ft 0 in.	2 ft 2 in.	0 ft 7 in.	4 ft 0 in.

† assumes supply transformer sized at less than 300 kVA with over-current interrupting devices.

Arc-Flash Protection Levels:

Arc Flash Protection Level	Description of clothing components	Min. Rating
Level A: Basic work clothing for elect. qual. workers (equivalent to NFPA 70E 2004 hazard category 0)	natural fiber long sleeve shirt; natural fiber long pants; natural fiber undergarments; safety glasses; and electric hazard rated safety shoes	1.2 cal/cm^2
Level B: Protection for electrically qualified workers* (equivalent to NFPA 70E 2004 hazard category 2)	basic work clothing (Level A) plus: fire resistant coveralls rated to at least 8 cal/cm^2; voltage rated gloves; hard hat*; arc-flash rated face shield*; and hearing protection*	8 cal/cm^2
Level C: Protection for electrically qualified workers (equivalent to NFPA 70E 2004 hazard category 4)	basic work clothing (Level A) plus: fire resistant coveralls w/ double layer switching hood rated to at least 40 cal/cm^2 (i.e., a complete arc flash suit); and hearing protection	40 cal/cm^2

* Some tasks that require Level B Protection do not require an arc-flash rated face shield, hard hat and hearing protection.

Example tasks with acceptable PPE requirements (for more information contact your foreman or supervisor):

Task (Assumes Equipment Is Energized, and Work Is Done Within the Flash Protection Boundary)	Flash Protection	V-rated Gloves	V-rated Tools
Panel boards Rated 240 V and Below — Note 1 and Note 3			
Circuit breaker (CB) or fused switch operation with covers on	A	No	No
CB or fused switch operation with covers off	A	No	No
Work on energized parts, including voltage testing	B#	Yes	Yes
Remove/install CBs or fused switches	B#	Yes	Yes
Removal of bolted covers (to expose bare, energized parts)	B#	No	No
Opening hinged covers (to expose bare, energized parts)	A	No	No
Panel boards or Switchboards Rated >240 V and up to 600 V (with molded case or insulated case circuit breakers) — Note 1 and Note 3			
CB or fused switch operation with covers on	A	No	No
CB or fused switch operation with covers off	B#	No	No
Work on energized parts, including voltage testing	B	Yes	Yes
600 V Class Motor Control Centers (MCCs) — Note 2 (except as indicated) and Note 3			
CB or fused switch or starter operation with enclosure doors closed	A	No	No
Reading a panel meter while operating a meter switch	A	No	No
CB or fused switch or starter operation with enclosure doors open	B#	No	No
Work on energized parts, including voltage testing	B	Yes	Yes
Work on control circuits with energized parts 120 V or below, exposed	A	Yes	Yes
Work on control circuits with energized parts >120 V, exposed	B	Yes	Yes
Insertion or removal of individual starter “buckets” from MCC — Note 4	C	Yes	No
Application of safety grounds, after voltage test	B	Yes	No
Removal of bolted covers (to expose bare, energized parts)	B	No	No
Opening hinged covers (to expose bare, energized parts)	B#	No	No
Other 600 V Class (277 V through 600 V, nominal) Equipment — Note 3			
Lighting or small power transformers (600 V, maximum)	—	—	—
Removal of bolted covers (to expose bare, energized parts)	B	No	No
Opening hinged covers (to expose bare, energized parts)	B#	No	No
Work on energized parts, including voltage testing	B	Yes	Yes
Application of safety grounds, after voltage test	B	Yes	No

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B# means that an arc-flash rated face shield, hard hat & hearing protection are not required for this task. Other Level B protection is required

Notes:

1. 25 kA short circuit current available, 0.03 second (2 cycle) fault clearing time.
2. 65 kA short circuit current available, 0.03 seconds (2cycles) fault clearing time.
3. For < 10 kA short circuit current available, the hazard/risk category required may be reduced by one number.
4. 65 kA short circuit current available, 0.33 second (20 cycle) fault clearing time.

AMBULANCE & FIRE
Directorate of Emergency Services / Fire – 718-630-4357
Alternate – 911
Directorate of Public Works-O&M Division – 718-630-4931
Installation Safety Office – 718-630-4232